intel

JUL 1 3 2006

Attorney Docket No.: P9191D Application No.: 09/888,128

Page 2

## REMARKS

Claims 9, 10, 12-15, 17, 18, 21, 22, 24-27, 29-31, 33-36, 38, 39 and 41-56 remain pending.

In the Office Action, the Examiner rejected claims 9, 10, 13, 21, and 22 under 35 U.S.C. § 102(b) as being anticipated by Kotha et al. (U.S. Patent No. 5,521,614); rejected claims 14, 15, 18, 26, 27, 30, 31, 34, 35, 36, 39, 42, 45, 47, 49, 51, and 53 under 35 U.S.C. § 103(a) as being unpatentable over Kotha et al. in view of Bugg (U.S. Patent No. 5,016,000); rejected claims 12, 17, 19, 24, 25, 29, 33, and 38 under 35 U.S.C. § 103(a) as being unpatentable over Kotha et al. in view of Bugg and further in view of Bril et al. (U.S. Patent No. 5,539,428); and stated that claims 52 and 54-56 would be allowable if rewritten in independent form.

## Claims 9, 10, 13, 21, and 22:

Applicant respectfully traverses the § 102(b) rejection of claims 9, 10, 13, 21, and 22 over Kotha et al. Independent claims 9 and 21 require a method and program storage device including, inter alia, "forming a horizontal expansion pattern... based on character code and row number of the text character cell." Kotha et al. fails to teach or suggest all elements of claims 9 and 21.

# A. Clear factual error:

As explained in the Preliminary Amendment filed December 23, 2004, Kotha et al. discloses at most, horizontal expansion based solely on a character code. In support of this explanation, Applicant cited to Fig. 7A of Kotha et al. This portion of the Preliminary Amendment was not answered on page 11 of the Office Action. Because it was not answered, the explanation will be repeated.

Col. 4, lines 12-14, of Kotha et al. states:

FIG. 7A is a block diagram of the hardware used in expanding text characters horizontally in the present invention.

Applicant respectfully reminds the Examiner of the duty to explicitly answer all material traversed in accordance with M.P.E.P. § 707.07(f).

Attorney Docket No.: P9191D Application No.: 09/888,128

Page 3

It should be noted that none of the other figures in <u>Kotha et al.</u> describe an apparatus used in expanding text characters horizontally. So if <u>Kotha et al.</u> discloses the claim limitation in question, it must be found in Fig. 7A.

The only inputs to the hardware in Fig. 7A are an ASCII character code signal, a video clock signal, and parallel information representing graphics data (col. 7, lines 11-17). Fig. 7A of Kotha et al. does not have an input for row number. Thus, it is clear factual error to allege or imply that the expander in Fig. 7A of Kotha et al., which is the only horizontal expander disclosed in the reference, forms a horizontal expansion pattern "based on row number."

For completeness, Applicant notes that the remaining cited portions of Kotha et al. (i.e., col. 5, lines 5-15 and 34-36, col. 8, lines 30-41, and Fig. 13 on page 3 of the Office Action; and Fig. 13, element 1303, col. 5, lines 5-10 and 34-36, col. 8, lines 20-45, and col. 6, lines 41-46 on page 11 of the Office Action) also fail to disclose the claim limitation in question. None of these portions of Kotha et al. expressly or impliedly disclose "forming a horizontal expansion pattern... based on... row number of the text character cell" as claimed. For example, none even mentions the term "row number." If the Examiner disagrees, he is respectfully requested to provide a quotation from Kotha et al. showing an explicit disclosure.

Because neither Fig. 7A of Kotha et al. nor the remaining portions of Kotha et al. cited by the Examiner show or otherwise disclose "forming a horizontal expansion pattern... based on... row number of the text character cell," the § 102(b) rejection of claims 9, 10, 13, 21, and 22 includes clear factual error and should be withdrawn.

## B. Clear legal error:

Page 11 of the Office Action seems to assert that applying the same expansion pattern to every row meets the claim limitation in question. If this is indeed the Examiner's position, it is clear legal error for the following reasons.

7036333303

Attorney Docket No.: P9191D Application No.: 09/888,128

Page 4

As is evident from the figures, each row of the character in Fig. 1 of Kotha et al. has its last pixel duplicated twice (as shown in Fig. 2 for a row) to produce the horizontally expanded character in Fig. 4. As stated at col. 6, lines 43-45 of Kotha et al. (with emphasis added):

Each row and column in FIG. 4 has experienced the expansion illustrated in FIG. 2 and FIG. 3.

Thus, Kotha et al. discloses the same horizontal expansion for each and every row in the font character. This is consistent with the hardware in Fig. 7A mentioned above. In other words, Kotha et al. discloses the same horizontal expansion regardless of row number of the character.

For the Examiner to read the claimed "forming a horizontal expansion pattern... based on . . . row number of the text character cell" on Kotha et al., which forms a horizontal expansion pattern without regard to row number, is clear legal error. Such an interpretation either reads the "based on row number" out of the claim or ignores it entirely, both of which are improper. Because the § 102(b) rejection of claims 9, 10, 13, 21, and 22 also includes clear legal error, it should be withdrawn.

#### Claims 14, 15, 18, 26, 27, 30, 31, 34, 35, 36, 39, 42, 45, 47, 49, 51, and 53:

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See M.P.E.P. § 2143.

#### A. All limitations not taught or suggested:

A prima facie case of obviousness has not been established for claims 14, 15, 18, 26, 27, 30, 31, 34, 35, 36, 39, 42, 45, 47, 49, 51, and 53 at least because the references as combined fail to teach or suggest all the claim limitations. Independent claims 14, 26, 30, and 35 require a method, program storage device, and apparatus including that, inter alia, "the horizontal

Attorney Docket No.: P9191D Application No.: 09/888,128

Page 5

7 /9

expansion pattern is contained in lookup tables indexed by the character code and the row number." Kotha et al. and Bugg fail to teach or suggest at least this limitation.

Page 5 of the Office Action admits that Kotha et al. does not teach this limitation, but alleges that it is taught or suggested in col. 3, lines 10-26 and/or col. 5, lines 64-66 of Bugg. This allegation is simply incorrect.

Instead, Bugg provides in the relevant portion of the first citation at col. 3, lines 14-23 (emphasis added):

a character memory in which character information that identifies the patterns of discrete dots which define the character shapes are stored as corresponding patterns of data bits in respective character memory cell matrices (each composed of a respective plurality of addressable memory locations of the addressing means), addressing means for selectively addressing and reading-out in each scan cycle of the display device the character information in accordance with the stored digital codes.

This portion of **Bugg** fails to teach or suggest that the character information is a "horizontal expansion pattern" as set forth in claims 14, 26, 30, and 35. It also fails to teach or suggest "lookup tables indexed by the character code and the row number" as required by the claims.

For completeness, Bugg provides at col. 5, lines 64-66:

not be altered in height: only the remainder of the characters would be doubled in height. Further examples of the effect of the double height algorithm in accordance .

This portion of Bugg also fails to teach or suggest a "horizontal expansion pattern" or "lookup tables indexed by the character code and the row number" as required by the claims.

Thus, a prima facie case of obviousness has not been established for claims 14, 15, 18, 26, 27, 30, 31, 34, 35, 36, 39, 42, 45, 47, 49, 51, and 53, because Kotha et al. and Bugg as combined fail to teach or suggest all claim limitations. The 35 U.S.C. § 103(a) rejection should be withdrawn for at least this reason.

7036333303

Attorney Docket No.: P9191D Application No.: 09/888,128

Page 6

# B. No motivation or suggestion to combine:

A prima facie case of obviousness has not been established for claims 14, 15, 18, 26, 27, 30, 31, 34, 35, 36, 39, 42, 45, 47, 49, 51, and 53, because there is no suggestion or motivation to combine the references. No evidence has been provided of any deficiency or need in Kotha et al. that would have motivated one of ordinary skill in the art to add any teachings from Bugg. Instead, only a conclusion that "a look-up table provide an efficient means of addressing data" has been alleged on page 6, line 8, of the Office Action, without any evidence of a corresponding need or shortcoming in Kotha et al. that would have motivated one of ordinary skill to modify Kotha et al. as proposed.

Legally, it is not enough that references could possibly be combined -- there must be some suggestion to do so. See M.P.E.P. § 2143.01(III) ("Fact That References Can Be Combined Or Modified Is Not Sufficient To Establish Prima Facie Obviousness."). Because no evidence of such suggestion or motivation has been provided, a *prima facie* case of obviousness has not been established, and the § 103(a) rejection should be withdrawn.

Further, at least Kotha et al. teaches away from the proposed combination. See M.P.E.P. § 2145(X)(D) ("proposed modification cannot render the prior art unsatisfactory for its intended purpose or change the principle of operation of a reference"). Kotha et al. discloses a hardware-based expander to pad rows of a character (see Fig. 7A and its associated description in col. 7). For Kotha et al. s purposes (e.g., padding rows with twice duplicated values), a software-based look-up table would be slower and less effective than the circuit shown in Fig. 7A. Thus, at least Kotha et al. teaches away from the proposed combination. A prima facie case of obviousness has not been established for claims 14, 15, 18, 26, 27, 30, 31, 34, 35, 36, 39, 42, 45, 47, 49, 51, and 53 for this additional reason.

## Claims 12, 17, 19, 24, 25, 29, 33, and 38:

Regarding claims 12, 17, 19, 24, 25, 29, 33, and 38, the addition of <u>Bril et al.</u> fails to cure the deficiencies noted above in the rejection of claims 11, 16, 18, 23, 28, 32, and 37, from which these claims depend. In particular, <u>Bril et al.</u> also fails to teach or suggest a "horizontal"

Attorney Docket No.: P9191D Application No.: 09/888,128

Page 7

expansion pattern [that] is contained in lookup tables indexed by the character code and the row number." Also, the addition of <u>Bril et al.</u>, even if it were proper, fails to cure the lack of motivation to combine <u>Kotha et al.</u> and <u>Bugg</u> explained above. Hence, the addition of <u>Bril et al.</u> does not establish a *prima facie* case of obviousness for claims 12, 17, 19, 24, 25, 29, 33, and 38.

Reconsideration and allowance of pending claims 9, 10, 12-15, 17, 18, 21, 22, 24-27, 29-31, 33-36, 38, 39 and 41-56 are respectfully requested.

In the event that any outstanding matters remain in this application, Applicant requests that the Examiner contact Alan Pedersen-Giles, attorney for Applicant, at the number below to discuss such matters.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0221 and please credit any excess fees to such deposit account.

Respectfully submitted,

Dated: <u>July 13, 2006</u>

Alan Pedersen-Giles Registration No. 39,996

c/o Intel Americas LF3 4030 Lafayette Center Drive Chantilly, VA 20151 (703) 633-1061